

**Amendments to the Claims**

The following listing of claims will replace all prior versions and/or listings of claims in the application:

**Listing of Claims:**

1. (currently amended): A model of dental caries, comprising:  
an artificial tooth, wherein the artificial tooth comprises a cavity, and wherein the cavity comprises:  
an opening that extends from an exterior surface of the artificial tooth to at least a simulated dentinoenamel junction of the artificial tooth; and  
wherein the opening extends along at least a portion of the simulated dentinoenamel junction; and  
simulated decay material in a portion of the cavity.
2. (currently amended): The model of dental caries of claim 1, wherein a portion of the opening contains simulated decay material.
3. (original): The model of dental caries of claim 1, wherein the opening comprises one or more grooves along the simulated dentinoenamel junction.
4. (original): The model of dental caries of claim 1, wherein the opening comprises one or more grooves, and wherein at least one of the grooves contains simulated decay material.
5. (original): The model of dental caries of claim 1, wherein the artificial tooth comprises resin.
6. (original): The model of dental caries of claim 1, wherein the artificial tooth comprises melamine resin.

7. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity is configured to bond to the simulated decay material.
8. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity is textured.
9. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity is textured with an etching solution.
10. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity is textured with an etching solution, and wherein the etching solution comprises an acid.
11. (original): The model of dental caries of claim 1, wherein the simulated decay material comprises a resin material.
12. (original): The model of dental caries of claim 1, wherein the simulated decay material comprises a porous substance.
13. (original): The model of dental caries of claim 1, wherein the simulated decay material comprises a porous substance, and wherein the porous substance comprises pumice.
14. (original): The model of dental caries of claim 1, wherein the simulated decay material comprises coloring.
15. (original): The model of dental caries of claim 1, wherein the simulated decay material comprises food coloring.
16. (original): The model of dental caries of claim 1, wherein the simulated decay material is homogeneous.
17. (original): The model of dental caries of claim 1, wherein the simulated decay material is

curable.

18. (original): The model of dental caries of claim 1, wherein the simulated decay material is light curable.

19. (original): The model of dental caries of claim 1, wherein the simulated decay material is curable with visible light.

20. (original): The model of dental caries of claim 1, wherein the simulated decay material is detectable by caries detecting stain.

21. (original): The model of dental caries of claim 1, wherein the simulated decay material is radiolucent.

22. (original): The model of dental caries of claim 1, wherein the simulated decay material is radio-opaque.

23. (original): The model of dental caries of claim 1, wherein the simulated decay material is of uniform hardness.

24. (original): The model of dental caries of claim 1, wherein an outer layer of simulated decay material is softer than an inner layer of simulated decay material.

25. (original): The model of dental caries of claim 1, wherein an inner layer of simulated decay material has a greater hardness than an outer layer of simulated decay material.

26. (currently amended): A model of dental caries, comprising:  
an artificial tooth, wherein the artificial tooth comprises a cavity, and wherein the cavity comprises:

an opening that extends from an exterior surface of the artificial tooth to at least a simulated dentinoenamel junction of the artificial tooth; and

one or more grooves extending from the opening; and  
simulated decay material in a portion of the cavity.

27. (original): The model of dental caries of claim 26, wherein the opening contains simulated decay material.
28. (original): The model of dental caries of claim 26, wherein at least one of the grooves extends along at least a portion of the simulated dentinoenamel junction.
29. (original): The model of dental caries of claim 26, wherein at least one of the grooves extends along at least a portion of the simulated dentinoenamel junction, and wherein at least one of the grooves contains simulated decay material.
30. (original): The model of dental caries of claim 26, wherein the artificial tooth comprises resin.
31. (original): The model of dental caries of claim 26, wherein the simulated decay material is radiolucent.
32. (original): The model of dental caries of claim 26, wherein the simulated decay material is radio-opaque.
33. (original): The model of dental caries of claim 26, wherein the simulated decay material is of uniform hardness.
34. (original): The model of dental caries of claim 26, wherein an outer layer of simulated decay material is softer than an inner layer of simulated decay material.
35. (original): The model of dental caries of claim 26, wherein an inner layer of simulated decay material has a greater hardness than an outer layer of simulated decay material.

36. (currently amended): A method comprising:  
~~forming-cutting~~ a cavity in an artificial tooth, wherein the cavity comprises:  
an opening extending from an exterior surface of the artificial tooth to at least a  
simulated dentinoenamel junction of the artificial tooth; and  
wherein the opening extends along at least a portion of the simulated  
dentinoenamel junction; and  
applying simulated decay material to the cavity.

37-67. (cancelled)